QA Consulting

JavaScript Test

TRAINING MATERIALS - COURSE ASSESSMENTS

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TEST INSTRUCTIONS

Try to solve as many tasks as you can. The exam is closed book, meaning:

- No talking
- No help from the trainer
- No internet
- No phone
- No notes/books

Clarifications for the solution

- ALL functions should console.log their final output and nothing else.
- You are not to modify the existing function signatures, as they will be used to test your submission.
- You may create new functions as you see fit, but the grading will be done by calling the 5 existing functions.
- You are encouraged to create a small html page to test your submission yourself. However, this will not be marked.

Expected inputs for the functions

- FIND PRIME NUMBERS - should expect a positive integer number
- CONVERT TO COINS - should expect a positive integer number as the first parameter and an array of integers with at least two positive numbers in it
- UNIQUE LETTERS - should expect a non empty string that would be made up of all lower case letters from a-z
- FACTORIAL - should expect a positive integer number
- FIBONACCI - should expect a positive integer number

FIND PRIME NUMBERS

Write a JavaScript function that finds if the number is prime or not.
Note: A prime number (or a prime) is a natural number greater than 1 that has no positive divisors other than 1 and itself.

CONVERT TO COINS

Write a JavaScript function to convert an amount to coins.
Sample function: `amountTocoins(46, [25, 10, 5, 2, 1])`
Here 46 is the amount, and 25, 10, 5, 2, 1 are the coins available.
Output: `25, 10, 10, 1`

UNIQUE LETTERS

Write a JavaScript function to extract unique (those that appear only once) characters from a string.

Example string: `"thequickbrownfoxjumpsoverthelazydog"`
Expected Output: `"thequickbrownfxjmpsvlazydg"`

FACTORIAL

Write a JavaScript program to calculate the factorial of a number. In mathematics, the factorial of a non-negative integer n, denoted by n!, is the product of all positive integers less than or equal to n.
For example, `5! = 5 x 4 x 3 x 2 x 1 = 120`

FIBONACCI

Write a JavaScript program to get the first n Fibonacci numbers. Note: The Fibonacci sequence is the series of numbers: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34 . . . Each subsequent number is the sum of the previous two.